BITSAT Crash Course 2025 Lecture Planner - Mathematics

S.No.	Batch Name	Subject	Chapter Name	Topic	No. of Lecture	Date	Faculty Name
1	BITSAT Crash Course 2025	Mathematics	Basic Maths	Number system Wavy Curve Method Logarithm Modulus	1	Monday, February 24, 2025	Lucky Jethani Sir
2	BITSAT Crash Course 2025	Mathematics	Quadratic Equations	Introduction Common roots Theory of equation	1	Wednesday, February 26, 2025	Lucky Jethani Sir
3	BITSAT Crash Course 2025	Mathematics	Sequence and Series	Introduction Arithmetic Progression (AP) Geometric Progression (GP)	1	Thursday, February 27, 2025	Lucky Jethani Sir
4	BITSAT Crash Course 2025	Mathematics	Complex Number	Introduction Complex Numbers Algebraic operations Argand Plane or complex plane Conjugate of Complex Modulus of complex no Argument of Complex numbers	1	Friday, February 28, 2025	Lucky Jethani Sir
5	BITSAT Crash Course 2025	Mathematics	Permutations and Combinations	Introduction Counting Permutation Circular Permutation Combination	1	Monday, March 3, 2025	Lucky Jethani Sir
6	BITSAT Crash Course 2025	Mathematics	Binomial theorem	Introduction Expansion of (x+a)n General terms Middle terms	1	Tuesday, March 4, 2025	Lucky Jethani Sir
7	BITSAT Crash Course 2025	Mathematics	Determinants	Introduction Minor and cofactor General Properties	1	Wednesday, March 5, 2025	Lucky Jethani Sir
8	BITSAT Crash Course 2025	Mathematics	Matrices	Introduction Types of the Matrices Equality of Matrices Trace of a Matrix Determinants Operation on Matrices (Addition, Subtraction and Multiplication)	1	Thursday, March 6, 2025	Lucky Jethani Sir
9	BITSAT Crash Course 2025	Mathematics	Sets	Introduction Sets and their Representation Types of Sets Operations on Sets Types of Sets Operations on Sets	1	Friday, March 7, 2025	Lucky Jethani Sir
10	BITSAT Crash Course 2025	Mathematics	Relations and Functions	Relation Type of Relations Functions Functions Domain and Range of Functions	1	Monday, March 10, 2025	Lucky Jethani Sir
11	BITSAT Crash Course 2025	Mathematics	Inverse Trigonometric Functions	Introduction Domain/Range of ITF Graph	1	Tuesday, March 11, 2025	Lucky Jethani Sir
12	BITSAT Crash Course 2025	Mathematics	Trigonometric Functions & Trigonometric Equation	Introduction Trigonometric Ratios for Acute Angle Basic identities Sign Convention of the Trigonometric Functions Domain/Range of Trigonometric Functions Solution Type of Trigonometric Equation	1	Wednesday, March 12, 2025	Lucky Jethani Sir
13	BITSAT Crash Course 2025	Mathematics	Solution of Triangle	Introduction Sine rule Cosine rule Projection Formulae Napier's Analogy Auxiliary formulas	1	Thursday, March 13, 2025	Lucky Jethani Sir
14	BITSAT Crash Course 2025	Mathematics	Straight Lines	Introduction Section formula Different Centre of Triangle Area Locus	1	Monday, March 17, 2025	Lucky Jethani Sir
15	BITSAT Crash Course 2025	Mathematics	Circles	Introduction General equation Diameter form Parametric form Intercept made on axis Position of point w.r.t circle Position of straight lines w.r.t circles	1	Tuesday, March 18, 2025	Lucky Jethani Sir
16	BITSAT Crash Course 2025	Mathematics	Conic Sections:Parabola	Introduction Standard form Parametric form Types of parabola General equation Focal distance Position of point w.r.t. parabola Position of straight lines w.r.t parabola	1	Wednesday, March 19, 2025	Lucky Jethani Sir
17	BITSAT Crash Course 2025	Mathematics	Conic Sections:Ellipse	Introduction Standard form Auxiliary circle General equation Another definition	1	Thursday, March 20, 2025	Lucky Jethani Sir
18	BITSAT Crash Course 2025	Mathematics	Conic Sections:Hyperbola	Introduction Standard form General equation Another definition Auxiliary circle	1	Friday, March 21, 2025	Lucky Jethani Sir
19	BITSAT Crash Course 2025	Mathematics	Three dimensional Coordinate Geometry	Introduction Section Formulae Direction cosine Direction Ratio Line Angle between two line segment Perpendicular distance	1	Monday, March 24, 2025	Lucky Jethani Sir
20	BITSAT Crash Course 2025	Mathematics	Limit, Continuity and Differentiability	Limit Method finding limit	1	Tuesday, March 25, 2025	Lucky Jethani Sir
21	BITSAT Crash Course 2025	Mathematics	Method of Differentiation	Differentiation	1	Wednesday, March 26, 2025	Lucky Jethani Sir
22	BITSAT Crash Course 2025	Mathematics	Application of Derivatives	Rate of change Tangent and normal Angle between two curves Shortest distance between two curves Approximation and error Monotonicity Stationary points, Critical Points	1	Thursday, March 27, 2025	Lucky Jethani Sir
23	BITSAT Crash Course 2025	Mathematics	Indefinite Integration	Introduction Algebra of integration Integration by substitution Use of trigonometric identities Type Integration by parts Use of partial fraction	1	Friday, March 28, 2025	Lucky Jethani Sir

24	BITSAT Crash Course 2025	Mathematics	Definite Integration	Introduction Properties Newton Leibniz Theorem	1	Wednesday, April 9, 2025	Lucky Jethani Sir
25	BITSAT Crash Course 2025	Mathematics	Application of integrals	Area between two curves Curve Sketching	1	Monday, April 14, 2025	Lucky Jethani Sir
26	BITSAT Crash Course 2025	Mathematics	Differential Equation	Introduction Formation of differential Equation Solution of differential Equation Orthogonal trajectory	1	Tuesday, April 15, 2025	Lucky Jethani Sir
27	BITSAT Crash Course 2025	Mathematics	Probability	Introduction Event Some Results Probability Some theorems Independent events	1	Wednesday, April 16, 2025	Lucky Jethani Sir
28	BITSAT Crash Course 2025	Mathematics	Vectors	Introduction Type of vector Addition of Vector Proportion Collinear vector	1	Monday, April 21, 2025	Lucky Jethani Sir
29	BITSAT Crash Course 2025	Mathematics	Statistics	Introduction Variable (Variate) Relative and cumulative frequency Mean	1	Tuesday, April 22, 2025	Lucky Jethani Sir
30	BITSAT Crash Course 2025	Mathematics	Linear Programming	Various terminology and formulation of linear Programming Solution of linear Programming using graphical method, feasible and infeasible regions, feasible and infeasible solutions, optimal feasible solutions (upto three non trivial constraints)	1	Wednesday, April 23, 2025	Lucky Jethani Sir
31	BITSAT Crash Course 2025	Mathematics	Mathematical modeling	Formulation of simple real life problem, solution using matrices, calculus and linear programming.	1	Thursday, April 24, 2025	Lucky Jethani Sir